

KEEPING OUR COASTLINES CLEAN

A U.S. Virgin Islands
Marine Debris Curriculum





SOLUTIONS

Links to the Next Generation Science Standards, Quick Reference Guide

Curricula by Sub-Section		Middle School						High School					Sci & Engineering Practices
		ESS 3-1	ESS 3-2	ESS 3-3	ESS 3-4	ETS 1-1	ETS 1-2	ESS 3-1	ESS 3-3	ESS 3-4	ETS 1-1	ETS 1-2	
Composition & Abundance	Beach Box Exploration			✓									✓
	Investigating Oceanic Garbage Patches			✓					✓				✓
	A Degrading Experience			✓					✓				✓
Sources & Transportation	Watershed Walk	✓		✓				✓					✓
	Sources of Microplastics: Microbeads			✓									✓
Impacts	Entanglement Problems			✓	✓				✓	✓			✓
	Natural Disasters and Marine Debris		✓	✓	✓			✓					✓
Solutions	Linked Beach-Ghut Clean Ups	✓		✓					✓				✓
	Mitigating Microplastics			✓					✓				✓
	Upcycling Plastic Bags					✓	✓				✓	✓	
	Making Connections Through Art			✓					✓				✓

SPOTLIGHT

Making Outreach About Marine Debris More Accessible

Masters in Marine and Environmental Science (MMES) graduate students at the University of the Virgin Islands (UVI), Alex Gutting and Elizabeth Smith, had been looking for a way to involve elementary and middle school students in their efforts to educate the public in the U.S. Virgin Islands about the problem of marine debris and the actions individuals can take to reduce it. Through the “Pride in Our Seas, Pride in Ourselves” prevention grant from the NOAA Marine Debris Program awarded to UVI, Alex and Elizabeth were able to partner with Ms. Carol Wallace, an educator at Calvary Christian Academy (CCA), to join her in classrooms of grades 4-8 to teach about the problem of marine debris and how it affects ecosystem services provided by the ocean. This blossomed into television and radio appearances with Alex, Elizabeth, and students from CCA describing the benefits to the Virgin Islands community and the marine environment of making small changes in daily

habits that can lead to major reductions of waste going into the territory’s landfills, or being transported into the marine environment through inefficient waste management practices. Overall, nearly 1,000 members of the U.S. Virgin Islands community were reached by the “Outreach is Within Reach” Community Transfer Project events at the Tutu Park Mall and UVI’s “Afternoon on the Green.”

UVI MMES students Alex and Elizabeth indicated that the outcomes from the project that they were most proud of were the responses received from U.S. Virgin Islands residents who were unaware of the harm in using single-use plastics, and their commitment to making changes in their habits to avoid using these products in the future, as a result of their conversations with project participants. In addition, Alex and Elizabeth were also overwhelmed by the enthusiasm of the students in Ms. Wallace’s classes, the wonderful work they did repurposing marine debris into art, and serving as ambassadors in their own communities to reduce the amount of marine debris entering coastal waters of the U.S. Virgin Islands. Alex, Elizabeth, Ms. Wallace, and the students of CCA showed that sometimes it only takes a little more education, creativity, and outreach to truly make a difference in one’s community.



Above left: University of the Virgin Islands Masters of Marine & Environmental Science students, Alexandra Gutting and Elizabeth Smith, discuss the benefits of reusing materials to reduce marine debris, while providing participants with reusable drinking cups during an “Outreach is Within Reach” event at the Tutu Park Mall in St. Thomas (Photo credit: Carol Wallace). Above right: Calvary Christian Academy 6th grade student, Kayla Bellow, modelling a dress created with plastic waste, created by 8th grade student Yuanelis Baez (Photo credit: Carol Wallace).